International application No.

| Α.   | PCT/A  | U2004/000745  |  |  |  |  |  |
|--|--|---|--|--|--|--|--|
| 1  | CLASSIFICATION OF SUBJECT MATTER   |   |  |  |  |  |  |
| Int. Cl. 7:  | C12P 01/02, 07/64; C11B 01/00, 03/00; A61K 31/23, 31/20, 35/12, 35/78  |   |  |  |  |  |  |
| According to   | o International Patent Classification (IPC) or to both national classification and IPC   |   |  |  |  |  |  |
| B.   | FIELDS SEARCHED  |   |  |  |  |  |  |
| Minimum doo  | cumentation searched (classification system followed by classification symbols)  |   |  |  |  |  |  |
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| Documentatio   | on searched other than minimum documentation to the extent that such documents are included in the field   | ds searched   |  |  |  |  |  |
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| WPAT, Jap<br>(emu/ostric   | a base consulted during the international search (name of data base and, where practicable, search terms on the consultation of the consultation o | used)   |  |  |  |  |  |
| C.   | DOCUMENTS CONSIDERED TO BE RELEVANT  |   |  |  |  |  |  |
| Category*  | Citation of document, with indication, where appropriate, of the relevant passages   |   |  |  |  |  |  |
|  |  | Relevant to claim No.                                 |  |  |  |  |  |
|  | Papanikolaou S et al., (2002), Appl Microbiol Biotechnol, vol. 58, pp 308-312. 'Sin cell oil production by Varravia linelytics and in the control of the control of the cell oil production by Varravia linelytics.  |   |  |  |  |  |  |
|  | cell oil production by Yarrowia lipolytica growing on an industrial derivative of an fat in batch cultures'.   | imal  |  |  |  |  |  |
| X  | Whole document.  |   |  |  |  |  |  |
| Α  |  | 1-6   |  |  |  |  |  |
|  | Lazar G and Schroder FR (1992) Microbial degradation of natural products, pp 267   | 7-15  |  |  |  |  |  |
| X  | 291, ed Winkelmann G., publisher: VCH, Weinheim, Germany Whole document.   | / <del>-</del>  |  |  |  |  |  |
|  | Whole document.  | 1-6   |  |  |  |  |  |
|  |  |   |  |  |  |  |  |
| X  | EP 0 117 087 B1 (SUNTORY LTD) 16.June 1987<br>Whole document.  |   |  |  |  |  |  |
| 21   | whole document.  | .1-6  |  |  |  |  |  |
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| X F  | urther documents are list, 1: 1  |   |  |  |  |  |  |
|  | urther documents are listed in the continuation of Box C X See patent family   | y annex   |  |  |  |  |  |
| A" documen   | rategories of cited documents:  It defining the general state of the art which is  "T" later document published after the internal cited and the state of the art which is   |   |  |  |  |  |  |
| not consi  | deted to be of particular relevance conflict with the application but cited to understand the  | te or priority date and not                           |  |  |  |  |  |
| E" earlier ap  |  |   |  |  |  |  |  |
| шетац  | or cannot be considered to involve an inventive step who   | cannot be considered nove<br>en the document is taken |  |  |  |  |  |
| of willen  | t which may throw doubts on priority claim(s)  "Y"  document of particular relevance: the claimed invention  |   |  |  |  |  |  |
| anomet c   | lization of other special reason (as special)  |   |  |  |  |  |  |
| O" documen   | t referring to an oral disclosure, use, exhibition neans  "&"  document member of the same and the first and the f | ason skilled in the art                               |  |  |  |  |  |
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| or other n  P" document but later t  ate of the actual  August 20                        | t published prior to the international filing date han the priority date claimed all completion of the international search  Date of mailing of the international search repo  | ort 18 AUG 2002                                       |  |  |  |  |  |
| P" document but later that of the actus 3 August 20                                      | t published prior to the international filing date han the priority date claimed al completion of the international search  O4  Date of mailing of the international search repo   | ort 1 8 AUG 2004                                      |  |  |  |  |  |
| or other n document but later that of the actus August 20 ame and mailir USTRALIAN       | t published prior to the international filing date than the priority date claimed al completion of the international search O4  By address of the ISA/AU  PATENT OFFICE  | ort 18 AUG 2004                                       |  |  |  |  |  |
| P" document but later that of the actus August 20 ame and mailin USTRALIAN 10 BOX 200, W | published prior to the international filing date than the priority date claimed al completion of the international search O4  PATENT OFFICE ODEN ACT 2606, AUSTRALIA Date of mailing of the international search report of the same patent family  Authorized of the same patent family  Date of mailing of the international search report of the same patent family  Date of mailing of the international search report of the same patent family  Date of mailing of the international search report of the same patent family  Date of mailing of the international search report of the same patent family  Date of mailing of the international search report of the same patent family  Date of mailing of the international search report of the same patent family  | ort 1 8 AUG 2004                                      |  |  |  |  |  |

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PCT/AU2004/000745

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| C (Continuati | on). DOCUMENTS CONSIDERED TO BE RELEVANT   |             |  |  |
| Category*     | Citation of document, with indication, where appropriate, of the relevant passages   |             |  |  |
| X<br>A        | Ghosh PK et al., (1996) Science Progress, vol 79(2), pp 119-157. 'Microbial lipases: production and applications'. Whole document.   | 1-6<br>7-15 |  |  |
| A             | Magan N et al., (1993) International Journal of Food Microbiology, vol 19, pp 217-227.<br>'Lipolytic activity and degradation of rapeseed oil and rapeseed by spoilage fungi'. Whole document. | 1-6         |  |  |
| · <b>A</b>    | Okumura S et al., (1979) Biochimica et Biophysica Acta, vol 575, pp 156-165.<br>'Synthesis of various kinds of esters by four microbial lipases'. Whole document.                              | · 1-6       |  |  |
| A             | Gandhi N. (1997) JAOCS, vol 74(6), pp 621-634. 'Applications of lipase'. Whole document.   | 1-15        |  |  |
| A             | Pandey, A et al., (1999) Biotechnol Appl Biochem, vol 29, pp 119-131. 'The realm of microbial lipases in biotechnology'.  Whole document.  | 1-15        |  |  |
| <b>A</b>      | US 5,431,924 A (Ghosh et al.) 11 July 1995<br>Whole document.  | 7-15        |  |  |
| A             | US 4,485,173 A (Gierhart) 27 November 1984<br>Whole document.  | 1-6         |  |  |
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International application No.

PCT/AU2004/000745

| Box No. II Observations where certain claims were found unsearchable (Continuation of item 2 of first sheet)  This international search report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:    Claims Nos.:   Claims Nos.:   Decause they relate to subject matter not required to be searched by this Authority, namely:    Claims Nos.:   7-15  | Box No. II Observations where certain claims were found and the control of the co | 1C1/AU2004/000/45                    |
|--|--|--------------------------------------|
| Claims Nos.:   because they relate to subject matter not required to be searched by this Authority, namely:  | Continuation   | of item 2 of first sheet)            |
| because they relate to subject matter not required to be searched by this Authority, namely:  2. X Claims Nos.: 7-15  because they relate to parts of the international application that do not comply with the prescribed requirements to such an extent that no meaningful international search can be carried out, specifically: Claim 7 defines a method of treating inflammatory conditions using a biologically active oil or extract where the oil or extract is prepared by fungal metabolism/transformation of a lipid substrate. The scope of this claim is so broad and unclear that the search has been restricted to encompass the features of claim 1 as these are regarded as the essential features which define the invention.  3. Claims Nos.:  because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a)  Box No. III Observations where unity of invention is lacking (Continuation of item 3 of first sheet)  This International Searching Authority found multiple inventions in this international application, as follows:  1. As all required additional search fees were timely paid by the applicant, this international search report covers all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.  3. As only some of the required additional search fees were timely paid by the applicant, this international search report covers only those claims for which fees were paid, specifically claims Nos.:  No required additional search fees were timely paid by the applicant. Consequently, this international search report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:  The additional search fees were timely paid by the applicant. Consequently, this international search report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.: | This international search report has not been established in respect of certain claims under Articeasons:  | cle 17(2)(a) for the following       |
| 2. X Claims Nos.: 7-15  because they relate to parts of the international application that do not comply with the prescribed requirements to such an extent that no meaningful international search can be carried out, specifically: Claim 7 defines a method of treating inflammatory conditions using a biologically active oil or extract where the oil or extract is prepared by fungal metabolism/tansformation of a lipid substrate. The scope of this claim is so broad and unclear that the search has been restricted to encompass the features of claim 1 as these are regarded as the essential features which define the invention.  3. Claims Nos.:  because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a)  Box No. III Observations where unity of invention is lacking (Continuation of item 3 of first sheet)  This International Searching Authority found multiple inventions in this international application, as follows:  1. As all required additional search fees were timely paid by the applicant, this international search report covers all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.  3. As only some of the required additional search fees were timely paid by the applicant, this international search report covers only those claims for which fees were paid, specifically claims Nos.:  No required additional search fees were timely paid by the applicant. Consequently, this international search report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:  | 1. Claims Nos.:  |                                      |
| 2. X Claims Nos.: 7-15  because they relate to parts of the international application that do not comply with the prescribed requirements to such an extent that no meaningful international search can be carried out, specifically: Claim 7 defines a method of treating inflammatory conditions using a biologically active oil or extract where the oil or extract is prepared by fungal metabolism/tansformation of a lipid substrate. The scope of this claim is so broad and unclear that the search has been restricted to encompass the features of claim 1 as these are regarded as the essential features which define the invention.  3. Claims Nos.:  because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a)  Box No. III Observations where unity of invention is lacking (Continuation of item 3 of first sheet)  This International Searching Authority found multiple inventions in this international application, as follows:  1. As all required additional search fees were timely paid by the applicant, this international search report covers all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.  3. As only some of the required additional search fees were timely paid by the applicant, this international search report covers only those claims for which fees were paid, specifically claims Nos.:  No required additional search fees were timely paid by the applicant. Consequently, this international search report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:  | because they relate to subject matter not required to be searched by this Authority.   | namely:                              |
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| Claim 7 defines a method of treating inflammatory conditions using a biologically active oil or extract where the oil or extract is prepared by fungal metabolism/transformation of a lipid substrate. The scope of this claim is so broad and unclear that the search has been restricted to encompass the features of claim 1 as these are regarded as the essential features which define the invention.  3.  | ——————————————————————————————————————   |                                      |
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| This International Searching Authority found multiple inventions in this international application, as follows:  1.  | Box No. III Observations where unity of invention is lacking (Continuation of item 3 of fi   | irst sheet)                          |
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Information on patent family members

International application No. PCT/AU2004/000745

This Annex lists the known "A" publication level patent family members relating to the patent documents cited in the above-mentioned international search report. The Australian Patent Office is in no way liable for these particulars which are merely given for the purpose of information.

| Patent Document Cited in<br>Search Report |         | Patent Family Member |          |    |          |    |          |
|---|---------|----------------------|----------|----|----------|----|----------|
| EP  | 0117087 | AU                   | 23812/84 | AU | 23816/84 | CA | 1247011  |
|   |         | EP                   | 0116439  | JР | 59141514 | JР | 59141515 |
|   |         | Ъ                    | 59152307 | JР | 59152308 | JР | 59172410 |
|   |         | JР                   | 59172411 |    | , .      |    |          |
| US  | 5431924 | AU                   | 89452/91 | CA | 2096242  | EP | 0560806  |
|   |         | WO                   | 9208470  |    | •        |    |          |
| US  | 4485173 | AR                   | 231307   | AU | 78641/81 | CA | 1174619  |
|   |         | DE                   | 3201427  | GB | 2091286  | JР | 57144987 |
|   |         | NZ                   | 199218   |    |          |    |          |

Due to data integration issues this family listing may not include 10 digit Australian applications filed since May 2001.

END OF ANNEX